DECISION RECORD
AND
FINDING OF NO SIGNIFICANT IMPACT
(DR/FONSI)

SOUTH FORK PRESCRIBED BURN
Environmental Assessment #
NV-040-03-031

Decision: I have reviewed the Environmental Assessment (EA) for the South Fork Prescribed Burn and concur with the analysis. I select the proposed action, as described, as my decision. This EA is in conformance with the Egan Resource Management Plan and is tiered to the Programmatic Environmental Assessment for the Ely District Managed Natural and Prescribed Fire Plan (EA NV-040-00-020) and provides site-specific NEPA analysis. Appropriate mitigation and monitoring are identified in the proposed action, and no additional measures are deemed necessary as result of the impact analysis.

Rationale: The proposed action will restore the health and vigor of aspen in the Goshute basin by eliminating encroaching conifers. The project will also reduce the threat of wildfire impacting the entire Goshute creek drainage and improve the habitat for several species of wildlife including blue grouse by introducing fire under prescribed conditions. The proposed action will have minimal impacts to watershed health and will not adversely impact the Goshute Basin wilderness study area or affect its eligibility for wilderness designation.

Findings of No Significant Impact: Based on the analysis I have determined that the proposed action will not have a significant effect on the quality of the human environment. An environmental impact statement (EIS) level of analysis is not required.

Rationale: The determining factors weighed by the Bureau of Land Management in reaching a finding of no significant impact are:

- The action will have no adverse effects on such unique characteristics as cultural resources, wilderness areas, wetlands, or riparian areas.
- The environmental effects of the action are neither controversial nor do they involve unique or unknown risks.
- The action will have no adverse effects on special status species (federally listed, proposed or candidate, threatened or endangered and state sensitive).
- The action does not threaten to violate a Federal, State, or local law or requirements imposed for the protection of the environment.
- The action will have no impact on migratory birds and their habitat.
- The action will have no adverse effects on the human health or environment of minority or low income populations.
- The cumulative impacts of the action would not be significant.

_____ _____

William E. Dunn Date
Fire Management Officer

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BACKGROUND INFORMATION

Need for the Proposal

Aspen are an important component of the habitat mix for many species of wildlife including blue grouse Dendragapus obscurus. It is notable that the majority of aspen stands in the West are aging (Mueggler 1989). Aspen are a species with cyclical life cycle dependant almost exclusively on vegetative reproduction (suckering). Vegetative reproduction events were historically induced by disturbance such as fire. Under natural conditions, Schier (1975) found that aspen in Utah matured and declined rapidly in 60 to 80 years. A rapid decline in vigor and increased susceptibility to disease accompanies this. In 1989, Mueggler reported that almost two thirds of aspen communities in the west were over 95 years old.

Aspen in the Cherry Creek Mountain range, like those noted throughout the West, are old, declining in vigor, and being outcompeted by coniferous species such as white fir Abies concolor. These declines have come as a result of the absence of periodic disturbance. With a continued lack of disturbance, further declines in vigor and health can be expected and reduction in aspen habitat conditions will continue.

Relationship to Planning

The proposed action is not specifically identified in the Egan Resource Management Plan. However, the proposed action in conformance with the wildlife decision on page 46 of the Egan Resource Area Record of Decision, which states: "In blue grouse habitat, manage stands of white fir or aspen for the desired seral stage for blue grouse." The proposed action is tiered to the analysis contained in the Programmatic Environmental Assessment for the Ely District Managed Natural and Prescribed Fire plan and incorporates by reference the Ely District Managed Natural and Prescribed Fire plan. These documents are available upon request for review from the Ely Field Office.

ISSUES

No major issues have been identified.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVE(S)

Proposed Action

A prescribed burn would be conducted on approximately 150 acres of aspen in the Goshute Basin on the north end of the Cherry Creek Mountain range. Based on a review of available published literature the project would be designed to produce predominantly a cool ground fire to consume surface duff and litter accumulations and kill the conifer overgrowth. A burn plan would be prepared concurrently with the environmental analysis and a smoke permit would be acquired from the State of Nevada. Burning would be expected to take up to two weeks to complete.

Residual smoldering may occur for one to two months after actual ignition operations are complete.

Treatment would be conducted during periods of the year when favorable environmental conditions facilitate achievement of the project objectives. Project resource objectives are:
1) Reduce or eliminate competing overstory conifer species and remove heavy needle and litter accumulations over a minimum of 80% of the project area.

2) Manage fire intensity so that "Crown" type burning occurs over less than 35% of the project area.

3) Release reproduction of aspen and associated understory species.

4) Improve the condition of understory species used by several species of wildlife including blue grouse such as currant Ribes Sp. and snowberry Symphoricarpos Sp.

5) Excluded livestock use from the project area until aspen regeneration reaches a minimum height of six feet or for a period of four years whichever is longer.

6) Protect arborglyphs and other fire sensitive cultural resources from both direct and extended indirect heat and flame exposures.

Prescribed burning treatments would be initiated by either aerial or ground ignition techniques. Firing pattern and rate would be managed to accomplish a predominantly moderate intensity fire with organic duff layers being left largely un-consumed except around large downed fuels. Large downed fuels would be allowed to burn out naturally. Significant scorching of green aspen trees in the burn unit would be expected under these conditions.

Burn unit would use a combination of constructed line, foam line, and natural barriers for control breaks. Hand constructed control lines would not be directly linked to the roads used for control lines. Instead a foam line would be used for 50 feet at these intersections to discourage future development of these lines as trails. Some vegetation within portions of existing roads may be removed to improve fire containment, however single or small groups of large trees on the road side would not be cut. Ladder fuels would be removed around these trees. Along internal burn edges, line construction would involve whole tree felling, limbing and light scraping of the ground surface. A temporary water tank could be placed at the summit next to the road and relay tanks could be placed at various intervals around the fire for holding. Hose lines may be laid around the eastern perimeter of the burn.

When safely practicable, line rehabilitation would commence. Line rehab would incorporate techniques for concealment of the line(s), stabilization of the soils and

placement of natural physical barriers to off-highway vehicle use. Line rehabilitation actions would vary depending on their location. Maximum effort would be undertaken in areas directly visible from the roads and segments which could develop into trails. In other areas less visible, line rehabilitation would concentrate on physical rehabilitation including soil stabilization.

If proposed treatments are scheduled during the established migratory bird nesting period, the project area would be surveyed for active raptor nests in conformance with district policy for ground disturbing activities during the nesting period (Instruction memorandum NV-040-2001-02). The identified migratory bird nesting period is May 15 to July 31. A cultural survey of treatment area would be conducted and appropriate site documentation would be completed prior to work commencement. Eligible cultural resources would be avoided or impacts would be mitigated as necessary before burning commences. No new roads or trails would be created, no off-road travel would occur within the Wilderness Study Area (WSA) as a result of the project. Control lines which are constructed would incorporate an irregular layout to minimize visual impacts wherever possible. If necessary, trees would be felled along the fire edge following treatment to further blur the evidence of human presence.

The project area would not be seeded and no fencing is proposed. Livestock grazing would be excluded from the project area until regenerated aspen reached a minimum height of six feet. If after four years environmental or stand health factors do not result in aspen reaching the desired height, the permittee will be consulted to determine willingness to maintain the closure. If this request is not supported, the area will be reopened to grazing use. Livestock exclusion would be accomplished with herding and riding through decision or agreement. The project area would be monitored during the spring/summer of 2004 to determine baseline conditions. Post-treatment monitoring of aspen and understory response would be monitored annually for a minimum of three years.

Achievement of the minimum aspen height standard for return of scheduled grazing use would be based on a minimum of two sites which are established cooperatively with the permittee and any other members of the interested public. The growth standard would be determined by measurement of a minimum of one hundred stems in each monitoring site. At least ninety percent of the total sample from both sites must meet or exceed the height standard in order for grazing to resume before the four year deadline.

The project would be monitored before, during and after the burn. Before the fire, the site would be categorized and fuels and vegetation variations would be plotted. Randomly placed monitoring plots would be established and marked and pre-treatment photos and vegetation data would be collected. During the fire, areas of high intensity burning and smoke production and direction of dispersal would be would be documented. (Within the same year as the burn, post-fire effects would be documented at the monitoring points with photos.) Starting one

year after the burn and continuing each year throughout the livestock closure period, the randomly placed monitoring points would be revisited. At each monitoring point, aspen regeneration and understory species response would be measured using a combination of line intercept transects and photos. Aspen heights are the basis for determining re-entry of livestock use. Aspen heights would be measured using either area or linear transects. Aspen heights would be measured to the nearest half foot up to the minimum sample size. Aspen would be measured at both the monitoring plots and other randomly located plots.

No Action Alternative

The No Action Alternative is no treatment of the aspen stand. The on-going process of overtopping by white fir would continue. Understory habitat conditions would continue to decline.

Alternative Considered but Deleted from Detailed Analysis

An alternative for treatment which included using mechanical or manual methods to accomplish the project objectives was considered but deleted from further analysis. While this alternative could accomplish the resource objectives of the project, this alternative was ruled out as being viable due to the degree of impacts on wilderness values. Mechanical manipulations of vegetation are explicitly ruled out in the Interim Management Policy for Lands Under Wilderness Review,BLM Handbook 8550.1 (IMP). Manual treatment would result in a major change to the visual resources of the area and would be unable to satisfy the "non-impairment" standard of the IMP ("…The imprint of mans work substantially unnoticeable"). The end product would consist of the area being overlain by a mass of felled trees. Cut stumps, even if low, would be very visible in the project area. Further, the cut trees would create an extreme fire hazard for approximately two to three years following treatment as the needles dried.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

The project area lies on the east side of the crest of the Cherry Creek Mountain Range on the south end of the Goshute Basin (Township 25 North, Range 63 East, portions of sections 8 and 9, Mount Diablo Base/Meridian). Goshute Creek is a short high gradient stream originating from snow and rain accumulations within the 6,184 acre Goshute Basin. Perennial flows in Goshute Creek are moderately to deeply incised within a narrow channel and originate from a series of springs on the north branch of the stream. Uninterrupted flow occurs over approximately 6.6 miles from these springs to the terminus of the creek at a series of wet meadows on private lands in North Steptoe Valley.

Goshute Creek also has a south branch. This tributary does not sustain a perennial flow. Short stretches of running water do occur on the upper elevation end of this branch associated with two springs. The project area lies at the top of the south branch of the creek but does not include the springs. Bonneville cutthroat trout occupy upper mountain segments of the main branch of the creek.

The proposed project lies at the upper end of the dry south branch of Goshute Creek. The project area is mostly comprised of a declining aspen stand which is invaded by white fir. There is minimal understory vegetation over much of the project area. Deadfall and litter make up a large percentage of the ground fuels. Surviving aspen are mature to decadent with average stem diameters six to twelve inches (DBH). Aspen densities are low and range from less than 100 to 400 trees per acre. White fir densities range between 400 and 600 stems per acre of multiple age classes. Ladder fuels are abundant.

The project area has not been inventoried or surveyed for weeds. Musk thistle Carduus nutans has been reported in Snow Creek. Snow Creek is located several miles from the project area but is still within the Cherry Creek Range. Numerous noxious weed species, including hoarycress Cardaria draba , Canada thistle Cirsium arvense , Russian knapweed Acroptilon repens , and saltcedar Tamarix ramosissima have been inventoried within the Goshute Creek drainage or along the valley bench road several miles to the east in Steptoe Valley. It is not known if any of these species or their seeds occur within the project area.

Western sage grouse Centrocercus urophasianus are a State of Nevada sensitive species as well as a BLM sensitive species. The U.S. Fish and Wildlife service has received seven petitions from various environmental groups to list the grouse as threatened or endangered across its entire range.

There are documented sage grouse leks in Steptoe Valley east of the project area and Butte Valley west of the project area on lower elevation benches. It is thought that the hen (female) grouse breed on the valley leks then fly to acceptable nesting habitat in areas around the proposed project area. Brooding birds are documented early summer through fall in the areas around the project. It is unlikely that sage grouse use the heavily wooded areas within the project area. There are documented ferruginous hawk Buteo regalis nest sites on lower elevation benches in Butte Valley west of the project area. The bald eagle Haliaeetus leucocephalus is a winter/early spring resident of habitats attendant to the project area. Several owl species including the western screech owl Otus kennicottii great horned owl Bubo virginianus and the flammulated owl Otus flammeolus may inhabit the more dense forested areas of the project area and forage over the more open areas. No special status plant or wildlife species are known to occur in the area of the proposed project.

The project area provides seasonal habitat for mule deer Odocoileus hemionus and elk Cervis elaphus. Blue grouse inhabit the area on a yearlong basis. In good nesting years, chukar partridge Alectoris chukar and occasional Hungarian partridge Perdix perdix can be observed in the project area. The area could also provide habitat acceptable to

nesting accipters as well as redtails, kestrels, and golden eagles in cliffs along the east side of the project area. Passerine and other bird species, small mammals, reptiles and amphibians common to the great basin environment can also be found in the project area.

The proposed project lies within the Cherry Creek Wild Horse Herd Management Area (HMA). The wild horse appropriate management level (AML) for the Medicine Butte Allotment portion of the HMA is zero. Wild horses may rarely drift into the area from adjacent HMA's.

The proposed burn project lies within the boundary of the Goshute Basin Allotment. Two permittees, Double U Livestock L.L.C. and Mr. Carol Sherman, have grazing privileges in this allotment. Double U Livestock is authorized to graze sheep (up to 350 AUMs) from July 1 to October 15 on even years. Carol Sherman is currently authorized for up to 99 AUMs of cattle use between July 1 to September 1. Mr. Sherman has taken voluntary non-use for conservation purposes on the Goshute Basin Allotment since March 1, 2000. Non-use is expected to continue.

The proposed project is located just inside the western boundary of the Goshute Canyon Wilderness Study Area (WSA) and inside the southwest corner of Goshute Canyon Instant Study Area (ISA). With exception of a short cherry-stem road which comprises the south boundary of the proposed project, there are no other developments or disturbances within the WSA in this area. The overwhelming impression of the area is that it retains its natural character, the presence of roads outside the WSA boundary are substantially unnoticeable. The topography and vegetative screening common in the Cherry Creek Mountains provide outstanding opportunities for solitude. Historic resources are supplemental values to the WSA. These supplemental values are mostly located on the lower reaches of the more accessible drainages.

Primitive recreation opportunities are outstanding in the Goshute Canyon WSA. The primary recreation activity in the proposed action area is hunting. Much of the WSA provides key habitat for a variety of wildlife. There are also excellent opportunities for primitive camping.

All WSAs have been classified as VRM Class I. Visual Resource Inventory (H-8410-1) states, "The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention." (page 6, paragraph 3).

On January 22, 2004, local Native American tribes (see list of groups contacted) were consulted on the proposed action in accordance with BLM Manual Handbook H-8160-1. The purpose of the consultation was to identify any traditional or religious areas within the project area. The consultation revealed no traditional religious or cultural concerns over the proposed action. A Class I cultural resources inventory was conducted for the proposed project area and the surrounding area out to a distance of one mile in January, 2004. The conclusions of this survey indicated no Native American traditionsl cultural

property values or National Register listed or eligible or cultural properties have been documented in the area.

The U.S. Fish and Wildlife Service was contacted on January 5, 2004. By letter received on January 22, 2004, the Service indicated that "To the best of our knowledge, there are no known listed or candidate species within the project area."

ENVIRONMENTAL CONSEQUENCES and CUMULATIVE EFFECTS

The following resources are either not present or will not be affected by the proposed action or alternative: Areas of Critical Environmental Concern, and Wild and Scenic Rivers, Wetlands, Prime or Unique Farmlands, Environmental Justice, Native American Religious Concerns, Wastes, Hazardous and Solid, Special Status Species (Federally listed, proposed or candidate Threatened or Endangered Species, and State sensitive species.

Cumulative effects will be discussed by element in this section. Cumulative effects are those impacts which result from the incremental impact of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

For the purposes of this analysis, the period over which cumulative effects will be considered includes the time between 1990 and 2010. Cumulative effects discussions will be limited to those elements of the human environment which have effects as a result of the proposed action to include: past actions have included area wildfires including the Cherry Fire of 2000, grazing decisions implemented in 2001 to modify livestock grazing use, and changes to wild horse management numbers implemented in 1992 and 2001. Reasonably foreseeable future actions for the purpose of this analysis include: additional prescribed fire activities in the Cherry Creek Mountain range and wild fire or fire use. It is likely that there will be a final decision on the status of the Goshute Canyon WSA. Finally, additional watershed restoration treatments including mechanical and biological treatments outside of the Goshute Canyon WSA.

Floodplains, and Riparian Areas

Proposed Action

The proposed project is not overlaid directly upon any floodplains or riparian areas. Portions of the dry south branch of Goshute Creek will be used as a control line for prescribed burn operations. Vegetation clearing would occur in these sites in order to construct a defensible control line. The line would be rehabilitated following the project including soil stabilization measures. Approximately 2.4% of the Goshute Creek watershed would be burned. There would be a possibility for some short-term (5-7 years) instability of the burned portion of the watershed until understory vegetation and sprouting aspen

revegetated the area and standing dead trees fell down. Until this happened, there would be a risk that a brief/intense summertime thunderstorm centered over the project area could lead to soil erosion and sedimentation of the stream. The associated energy of an overland flow event would have the ability to scour existing floodplain and riparian area soils and vegetation possibly leading to extension of existing headcuts. This potential effect would be mitigated by the buffer of unaltered vegetation between the proposed project area and the perennial stream segment (approximately 0.9 miles) and the mild 13% slope. The effects of flash flooding would further be mitigated by introducing fire in a controlled fashion in this watershed with more controllable intensities.

No Action Alternative

There would be no impacts to this resource under the alternative until natural fire enters Goshute Basin. Following this event, major soil and runn-off events would be expected to impact floodplains and riparian areas through deposition and erosion patterns.

Cumulative Impacts

Past actions in this watershed combined with the proposed action and the reasonably foreseeable future actions of wildfire, wildfire use for resource benefit, and fuels/vegetation management in the dense forested areas of Goshute Basin would have little impact to the already flash flood prone nature of the watershed and may mitigate the effects of future wildfires in this drainage. Fuels/vegetation management would not occur directly in the floodplain or riparian areas therefore, the standing vegetation which would resist erosion and slow the flood waters would remain intact.

Past flash floods have occurred regularly in Goshute basin. The last known flash flood event was in 2002. These events have downcut most of the perennial reach of the perennial streamcourse and have produced headcuts of varying sizes in the dry tributary drainages. Large wildfires in this basin could result in catastrophic impacts to the floodplains and riparian areas by increasing the intensity of flash floods. Burning of large acreage of standing vegetation in a wildfire could completely destabilize the watershed leading to major erosion.

Wilderness Values

Proposed Action

The Proposed Action is a surface disturbing activity as defined in the Interim Management Policy (IMP) for Lands Under Wilderness Review (H-8550-1). The IMP states "Prescribed burning may be used where necessary to maintain fire-dependent ecosystems." This restoration activity is considered an exemption to the non-impairment criteria. The proposed action would not impair the suitability of the area for preservation as wilderness. The proposed action would have no impact to the opportunities for solitude found in this area of Goshute Canyon WSA.

The Proposed Action would follow a minimum requirement decision guide which requires the use of the least impacting form of treatment. Hand methods would be used to cut the fire line prior to treatment. The fire line would not be linked directly to the boundary road or the cherry stem road. No new roads or trails would be constructed and no fences would be constructed. No manual thinning would be done for this project except for that minimally necessary to establish a containment line for ignition operations. Control lines would be, to the extent practicable, laid out in an irregular shape to minimize straight lines. Following burning, lines would be rehabilitated to blur the lines by felling trees to conceal and "roughen" up the lines. Livestock grazing would be excluded from the project area until aspen reach a height of six feet or following the end of the third growing season after treatment. With full implementation of the proposed action including rehabilitation measures, minimal impacts to the wilderness study area values should be realized.

Alternative
The No-Action Alternative would not impair the suitability of the area for preservation as wilderness. The no-action alternative would not enhance wilderness values.

Cumulative Impacts
Reasonably foreseeable past present and future actions, combined with the proposed action, would have no impact on the suitability of this area as wilderness.

Visual Resources Management

Proposed action
The level of change to the characteristic landscape would be minimal as a result of the proposed action. No structures, roads or trails are proposed for this action. The burn line would be cut using hand methods and would not be done in a straight line to avoid noticeable visual differences. Following line rehabilitation activities, the fire line would rehabilitated and be blended into the treatment area. The proposed activity would restore an existing aspen stand and would not attract the attention of visitors due to the Cherry fire which is driven through two miles to the south. The treatment would resemble a natural fire.

No Action Alternative
The No-Action Alternative would meet Class I objectives. There would be no change to characteristic landscape.

Cumulative Impacts
The current proposed action and any possible future fuels/vegetation management, fire use, and wildfires, combined with past actions in this area increase the diversity of the visual effect of this watershed. Areas of varying

vegetation and differing fire intensity would increase the uniqueness of the visual experience.

Cultural, Paleontological, and Historical Resource Values

Proposed action

The proposed action could affect fire sensitive cultural and historic resources. Historic sheep grazing has occurred throughout the Cherry Creek Range since the 1890's. Four miles to the south is the homestead of Beltran Paris, a notable eastern Nevada Basque sheepman (Beltran 1979). In addition, the project area is adjacent to the historic Cherry Creek Mining District. Within and adjacent to the project area there may be fire sensitive cultural resources such as arborglyphs. Within and adjacent to the project area it is highly unlikely other type of fire sensitive resources such as wood structures, rock art or other historic type resources are located. Prescribed burning would have varying degree of impacts to fire sensitive resources depending on the intensity and duration of the treatment. The implementation of the treatment could minimally damage or kill living trees with arborglyphs, and destroy some fire sensitive elements to sites.
High temperature or long duration heat exposure could scorch wood elements and living trees. Dead trees would slough the bark within two years resulting in the loss of the glyphs on that tree.

The arborglyphs in Goshute Basin are known to be numerous with style changes over time, right up to contemporary glyphs with hunters, campers names and initials. They are representative of the collective environment and cultural norms of the period. The variation of styles of individuals or groups of arborglyph panels are not likely to be individually unique across the basin. So the loss of one or more individual specimens in this project area would result in a minimal impact to these types of resources.

Alternative

The No-Action Alternative would have no immediate direct adverse effects on cultural properties. However, this action would in the long term increase the vulnerability for adverse effects to this resource. Aspen stems with arborglyphs would die naturally, or they may be destroyed by wildlife browsing or wildfire.

Cumulative Impacts

There is no recent history of wildfire in this area in contemporary times. A large wildfire in the drainage to the south in 2000 forebodes of the trend in this mountain range without intervention. Future wildfires threaten the entire historical complex of this area. Future fuels treatments and wildfire use for resource benefit events, if applied in thoughtful consideration of the known historical resources could prolong the existence of most of these resources. Inevitable vegetation changes in the Goshute Basin and Cherry Creek Mountain Range as a whole as a result of succession could adversely impact cultural resources on a site specific basis as white fir increases in large aspen stands and

large arborglyph bearing trees are shaded out. The most beneficial effect that planned activities such as fuels treatments have on this resource is the collection of documentation of such features before their loss to fire or other natural means. A wildfire proposes the opposite side of the spectrum in its unplanned randomness and tendency to produce effects on fire sensitive cultural features over larger areas.

Water Quality (Drinking/Ground)

Proposed Action

There is a small chance that thunderstorm related erosion, could result in short-term negative impacts to water quality. Generally, however, impacts would be very short lived, not lasting long after the initial sediment influx, or the initial high water flow. The Goshute watershed has had periods of degraded water quality resulting from thunderstorms or rapid snowmelt in the past, and any runoff events resulting from the proposed action would not be expected to increase the frequency or intensity of these events above historical occurrence.

No Action Alternative

There would be no effect on existing water quality from the alternative.

Cumulative Impacts

Past Present and Reasonably foreseeable future actions in this area would have minimal effect on this resource above the natural fluctuations resulting from seasonal events such as flash floods.

Air Quality

Proposed Action

The Proposed Action is located within a Class II air quality area and would only be expected to affect air quality with minimal emissions from smoke during the short duration of the burn. The emissions are not expected to exceed Nevada and National Ambient Air Quality Standards. In addition, it is expected that the emissions from smoke would not affect any Class I air quality areas or any smoke-sensitive areas. Certain Ignition techniques would be utilized to minimize smoke emissions. Ignition of the burn would take place when atmospheric conditions allow smoke to be vented away from smoke-sensitive areas, and disperse and dilute smoke before it accumulates in unacceptable concentrations. Key meteorological variables such as wind speed and direction, mixing height, and atmospheric stability would be monitored before and during burning to ensure good dispersion and dilution of emissions at the time of ignition and during the duration of the Proposed Action.

No Action Alternative

With the no action alternative, fuel loading would continue to increase. This could increase the chance of a wildfire. In the event of a wildfire, uncontrollable

emissions from smoke would be released into the atmosphere. Smoke sensitive areas, particularly roadways could be impacted.

Cumulative Impacts
Past present and reasonably foreseeable future actions in this watershed would have no lasting effects on air quality. Short term degradations from future wildfires prescribed fires and wildfire use for resource benefit events would persist, the difference is in the duration timing and seasonality of the degradation.

Wild Horses and Burros

Proposed action
This project would not affect wild horses because there are no horses in the area.

No Action Alternative
There would be no impacts to wild horses under the no-action alternative.

Cumulative Impacts
No wild horses currently inhabit the area. There would be no cumulative impacts to wild horses and burros.

Invasive, Non-Native Species (Including Noxious Weeds)

Proposed action
There have been no organized noxious weed inventories of the project area or vicinity. The presence of various species of noxious weeds and cheatgrass Bromus tectorum increases the chances that weeds are near or within the project area, particularly around the roads. Native thistle species increased dramatically on south slopes following the 2000 Cherry Fire, as did cheatgrass. No other noxious or invasive species have been noted during rangeland monitoring.

Depending on fire severity, ecosystem type, pre-fire abundance and location of musk thistle plants and seeds, and plant competition noxious or invasive species could have an opportunity to increase. New species could be introduced to the area as a result of prescribed fire vehicles and activities. However conformance with the Ely District noxious weed prevention schedule would reduce the risk of this happening. If fire intensity is low to moderate and understory vegetation responds rapidly, then musk thistle would not be expected to establish within this area.

No Action Alternative
There would be no effect on noxious or invasive species under this alternative.

Cumulative Impacts
There is no recent history of wildfire, prescribed fire, or wildfire use for resource benefit in this area. Future wildfire in the Goshute basin is expected, as is

additional fuels management activities and possibly wildfire use for resource benefit. The Cherry fire in 2000, a wildfire, affected a large area in the neighboring drainage to the south. Following this event and unexpected positive benefit was realized. Several pre-existing yet undetected stands of short white top were discovered and eradication actions were initiated. This effect would be expected in the Goshute basin following future unplanned disturbances, and with planned disturbances such as prescribed fire and wildfire use for resource benefit, opportunities for detecting additional noxious weed infestations before the disturbance would occur. Depending on fire intensity, the use of prescribed fire could reduce native plant competition and create favorable conditions for increases in noxious and invasive species. Wildfires and fire-use fires, depending on location and size could have major effects on the distribution and abundance of noxious and invasive species.

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Migratory Birds

Proposed action

In the short term, impacts to migratory birds would be negligible. Over time, once the understory vegetation reestablishes, the project area would become extremely desirable to migratory birds that utilize more open habitat types for nesting and foraging as well as cavity nesting.

No Action Alternative

Under the no-action alternative, habitat conditions would continue to decline for species adapted to open diverse environments. Habitat conditions would become better for species adapted to thick forested areas. The slow conversion from a diverse aspen community to a heavily shaded coniferous woodland would continue.

Cumulative Impacts

The trend toward even aged stands of vegetation in this basin reduces the diversity of species which can use the area. All forms of vegetation disturbance as long as they are dispersed and spaced out over time would improve habitat conditions for migratory birds by increasing the edge effect and diversity of habitat types. A large fire almost exclusively would have a negative effect on migratory birds as existing diversity was lost.

Wildlife

Proposed action

Over the short term (up to five years) impacts resulting from the Proposed Action would be negligible to nesting accipters and other raptors as well as big game species because of the project size. Animal displacement, and avoidance due to reduced cover would be expected. Beyond the short term, deer fawning and elk calving cover would be greatly improved once the aspen suckers obtain heights over six feet. The flush of herbaceous species in the years after the burn would

provide quality protein rich forbs for brooding blue grouse and sage grouse. Increasing cover would provide complex multi-storied cover for small mammal and both resident and migratory bird species. Lactating mule deer and elk would also benefit from an increase of available forage. .

No Action Alternative
Under the No-Action Alternative, habitat conditions would not change. The slow conversion from a diverse aspen community to a heavily shaded coniferous woodland would continue. Habitat values would decline for all species except those adapted to dense woodlands.

Cumulative Impacts
Past present and reasonably foreseeable future actions in this watershed could either benefit or harm wildlife depending on the frequency size and duration of the disturbance. Planned events such as wildfire and wildfire use for resource benefit would be anticipated to benefit wildlife by increasing diversity and varying the vegetation pattern. Unplanned events such as wildfires could adversely affect wildlife.

Recreation

Proposed action
Recreation opportunities would be limited for a period of time during the treatments. If treatment is scheduled during the weekdays impacts to recreation opportunities could be minimized. If the treatment occurs during the hunting season, the traffic and activity of fire personnel would cause wildlife to avoid the area and a zone around the access roads. As a result hunting opportunities would be reduced during burn activity.

No Action Alternative
The No-Action Alternative would have no impacts to recreation opportunities in the area until a wildfire event occurs, at which time, some types of uses may be reduced or eliminated completely.

Cumulative Impact
Past present and reasonably foreseeable future actions would have varying effects on recreation depending on the size timing and duration of the disturbance. Planned events, as with wildlife above, could be mitigated to reduce impacts, while unplanned events could have direct impacts on recreation by hindering reducing or eliminating some types of uses.

Livestock Management

Proposed action
The proposed action would have no impact on livestock grazing in the Goshute Basin Allotment since the proposed treatment area has traditionally not been used

by either sheep or cattle. Furthermore, herders can effectively keep sheep out of the treated area. Once the burn is completed, it is unlikely livestock would use the area due to the steepness of the terrain and the traditional use areas and herding practices on the allotment.

It is anticipated that cattle would not be using the Goshute Basin Allotment as Mr. Sherman continues taking voluntary non-use on this allotment.

No Action Alternative
The area currently does not provide and substantial benefit to livestock management. The site is steep, heavily forested, and provides little forage. This trend would continue under the no action alternative.

Cumulative Impacts
Past present and reasonably foreseeable future actions in this watershed have had highly varying effects on livestock management. Livestock numbers overall have been reduced in this area in the past as vegetation conditions have changed. Natural changed such as increasing conifer presence can be mitigated by fuels management projects wildfire and wildfire use for resource benefit.

PROPOSED MITIGATION MEASURES

Mitigation measures have been incorporated into the proposed action. Mitigation measures include considerations for historic and cultural resources, wilderness values, visual impacts, and migratory birds , noxious and invasive species, and sensitive species. No further mitigation measures are proposed.

SUGGESTED MONITORING

Monitoring is incorporated into the proposed action. Monitoring would be implemented to establish baseline conditions, and to measure effects of the treatment over time. Monitoring will also be used to determine if objectives are achieved. An interdisciplinary team of individuals including members of the public expressing interest would be included in the monitoring efforts.

CONSULTATION AND COORDINATION

Intensity of Public Interest and Record of Contacts
The following individuals and entities were consulted during development of the proposed action and alternatives.

U.S. Fish and Wildlife Service,
Grazing Permittees
Wilderness Interests
Ely Shoshone
Yamba Shoshone
Duckwater Paiute

Nevada Division of Wildlife
Eastern Nevada Landscape Coalition

In addition to these specific entities, the proposed action was posted on to the BLM internet website to solicit comments and input starting on January 8, 2004. No comments were recieved as a result of this posting. The input and recommendations received from all contacts was considered in the development of the proposed action and alternatives and was incorporated as appropriate into this document. These responses are on file and available in the Ely District Office.

Internal District Review
The following specialists were involved in the development of this document.

NAME	RESOURCE ADDRESSED
Shane DeForest	Author, Team lead
Karen Prentice	Noxious Weeds/Invasive Species
John Longinetti	Rangeland Management/Livestock Grazing
Jared Bybee	Wild Horses
Kurt Braun	Archeological/Historical/Paleontological Resources
Steve Leslie	Wilderness/Visual Resources, Recreation
Jeff Brower	Floodplains, Water Quality
Mike Perkins	Wildlife, Sensitive Species, Riparian Areas, Migratory Birds
Raymond Maestes	Fire Management/Prescribed Fire/Air Quality (Smoke)
Elvis Wall	Native American Religious Concerns, Tribal Coordination

Bibliography

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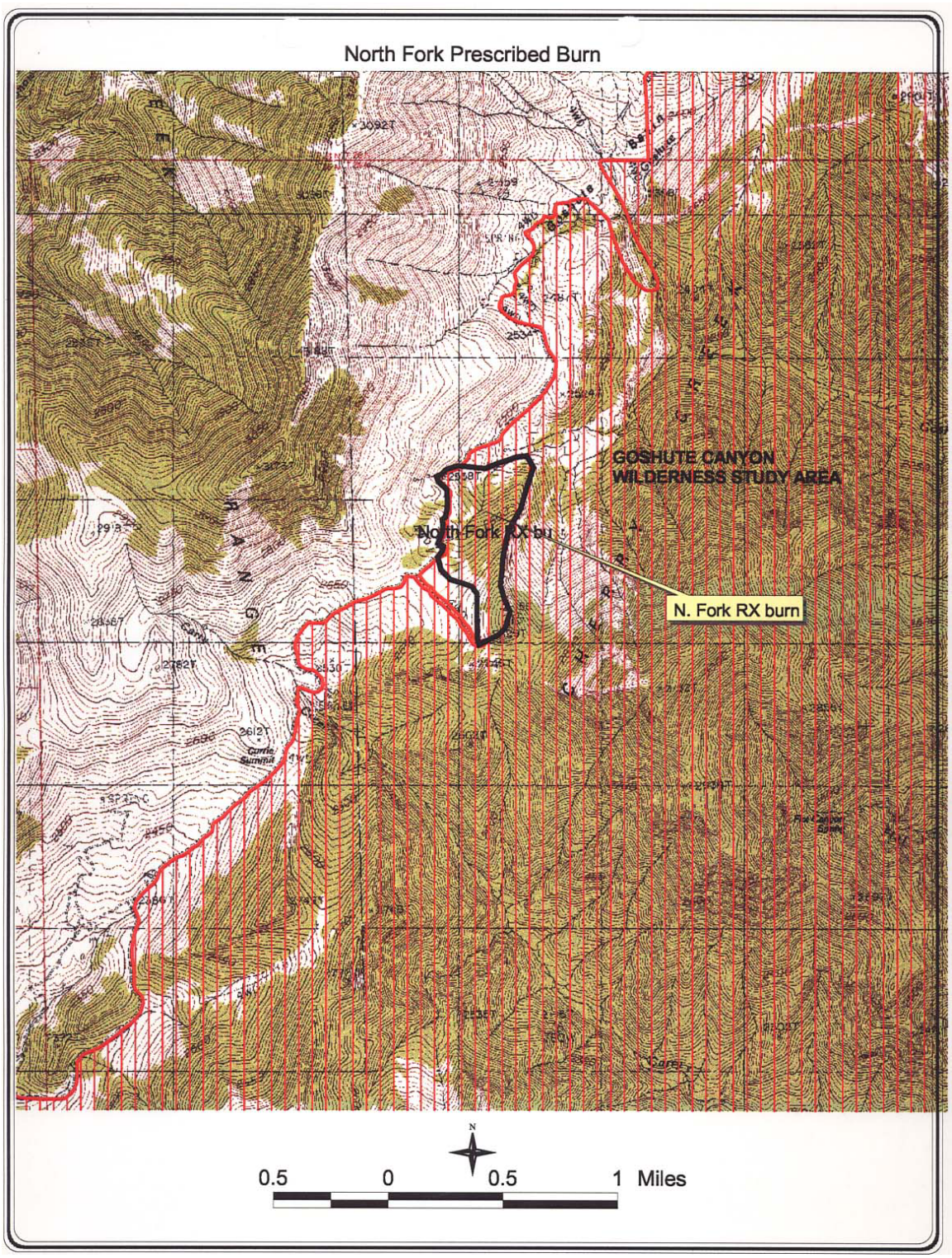
Schier, G.A. 1975. *Deterioration of Aspen Clones in the Middle Rocky Mountains*. Res. Pap. INT 170. Ogden, UT: U.S. Department of Agriculture Forest Service, Intermountain Forest and Range Experiment Station. 14p.

Paris, Beltran, and W. A. Douglas. 1979. *Beltran Basque Sheepman of the American West*. University of Nevada Press. Reno and Las Vegas.


North Fork Prescribed Burn
GOSHUTE CANYON
WILDERNESS STUDY AREA
North Fork RX bu
N. Fork RX burn
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0.5
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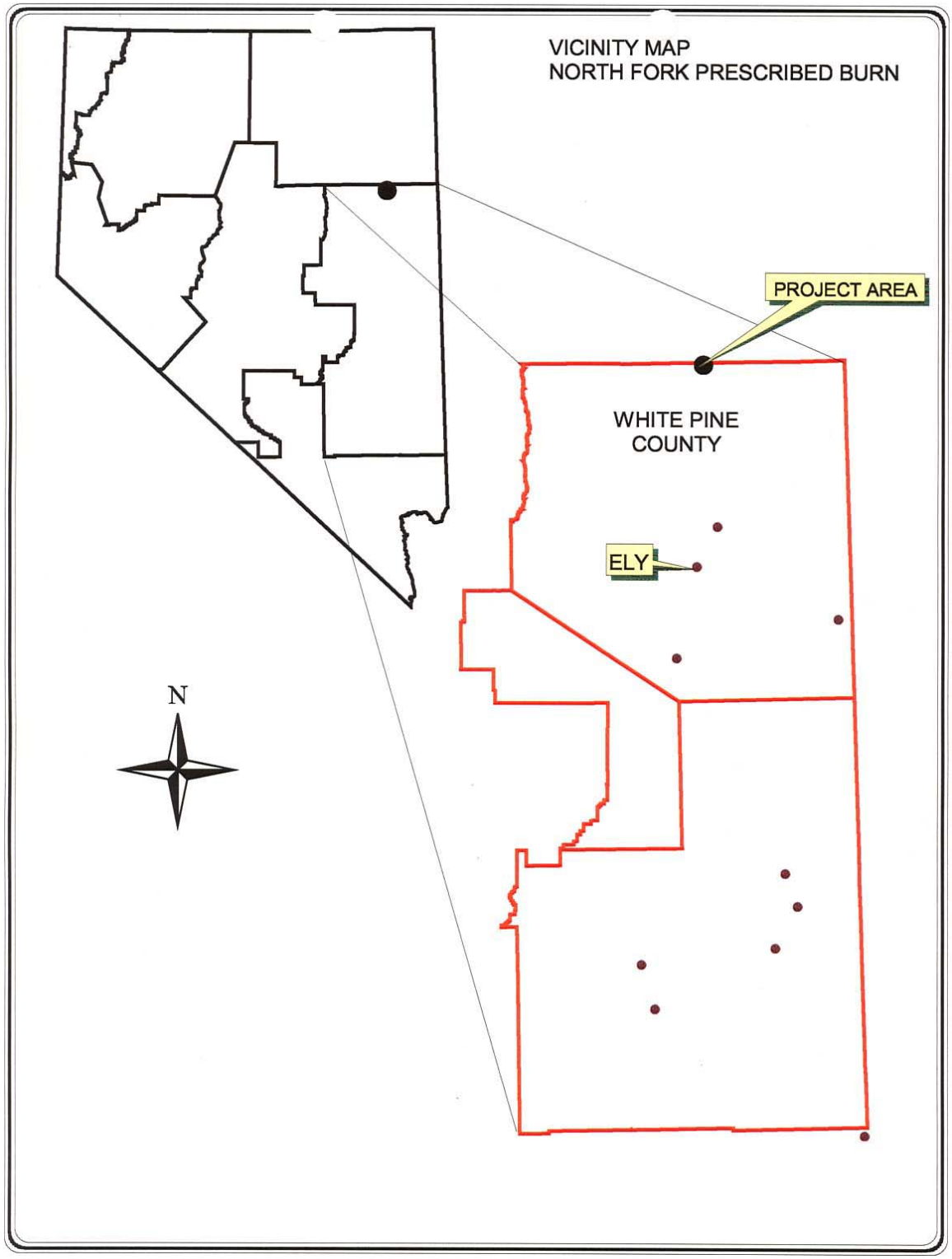
VICINITY MAP
NORTH FORK PRESCRIBED BURN
PROJECT AREA
WHITE PINE
COUNTY
ELY
N